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Sequence Listing was accepted.

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217-9197 (toll free).

Reviewer: markspencer

Timestamp: Mon Jul 30 09:51:14 EDT 2007

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Application No: 10561014

Version No: 1.0

Input Set:

Output Set:

Started: 2007-07-26 10:04:14.371

Finished: 2007-07-26 10:04:16.802

Elapsed: 0 hr(s) 0 min(s) 2 sec(s) 431 ms

Total Warnings: 15

Total Errors: 0

No. of SeqIDs Defined: 38

Actual SeqID Count: 38

Error code	Error Description
W 213	Artificial or Unknown found in <213> in SEQ ID (20)
W 213	Artificial or Unknown found in <213> in SEQ ID (21)
W 213	Artificial or Unknown found in <213> in SEQ ID (22)
W 213	Artificial or Unknown found in <213> in SEQ ID (23)
W 213	Artificial or Unknown found in <213> in SEQ ID (24)
W 213	Artificial or Unknown found in <213> in SEQ ID (25)
W 213	Artificial or Unknown found in <213> in SEQ ID (26)
W 213	Artificial or Unknown found in <213> in SEQ ID (27)
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W 213	Artificial or Unknown found in <213> in SEQ ID (29)
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W 213	Artificial or Unknown found in <213> in SEQ ID (32)
W 213	Artificial or Unknown found in <213> in SEQ ID (33)
W 213	Artificial or Unknown found in <213> in SEQ ID (34)

# SEQUENCE LISTING

<110> Pan, Shuchong  
Simari, Robert D.

<120> Isoforms of Brain Natriuretic Peptide

<130> 07039-409US1

<140> 10561014

<141> 2007-07-26

<150> US 10/561,014

<151> 2005-12-16

<150> PCT/US2004/017554

<151> 2004-06-02

<150> US 60/480,460

<151> 2003-06-20

<160> 38

<170> FastSEQ for Windows Version 4.0

<210> 1

<211> 33

<212> PRT

<213> Homo sapiens

<400> 1

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			20					25					30		
Leu															

<210> 2

<211> 14

<212> PRT

<213> Homo sapiens

<400> 2

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<210> 3

<211> 162

<212> PRT

<213> Homo sapiens

<400> 3

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                   20                                  25                                  30  
 Gly Ser Ala Ser Asp Leu Glu Thr Ser Gly Leu Gln Glu Gln Arg Asn  
                   35                                  40                                  45  
 His Leu Gln Gly Lys Leu Ser Glu Leu Gln Val Glu Gln Thr Ser Leu  
           50                                  55                                  60  
 Glu Pro Leu Gln Glu Ser Pro Arg Pro Thr Gly Val Trp Lys Ser Arg  
 65                                  70                                  75                                  80  
 Glu Val Ala Thr Glu Gly Ile Arg Gly His Arg Lys Met Val Leu Tyr  
                                   85                                  90                                  95  
 Thr Leu Arg Ala Pro Arg Ser Pro Lys Met Val Gln Gly Ser Gly Cys  
                   100                                  105                                  110  
 Phe Gly Arg Lys Met Asp Arg Ile Ser Ser Ser Ser Gly Leu Gly Cys  
           115                                  120                                  125  
 Lys Gly Lys His Pro Leu Pro Pro Arg Pro Pro Ser Pro Ile Pro Val  
           130                                  135                                  140  
 Cys Asp Thr Val Arg Val Thr Leu Gly Phe Val Val Ser Gly Asn His  
 145                                  150                                  155                                  160  
 Thr Leu

<210> 4  
 <211> 143  
 <212> PRT  
 <213> Homo sapiens

<400> 4  
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                   20                                  25                                  30  
 Gly Ser Ala Ser Asp Leu Glu Thr Ser Gly Leu Gln Glu Gln Arg Asn  
                   35                                  40                                  45  
 His Leu Gln Gly Lys Leu Ser Glu Leu Gln Val Glu Gln Thr Ser Leu  
           50                                  55                                  60  
 Glu Pro Leu Gln Glu Ser Pro Arg Pro Thr Gly Val Trp Lys Ser Arg  
 65                                  70                                  75                                  80  
 Glu Val Ala Thr Glu Gly Ile Arg Gly His Arg Lys Met Val Leu Tyr  
                                   85                                  90                                  95  
 Thr Leu Arg Ala Pro Arg Ser Pro Lys Met Val Gln Gly Ser Gly Cys  
                   100                                  105                                  110  
 Phe Gly Arg Lys Met Asp Arg Ile Ser Ser Ser Ser Gly Leu Gly Cys  
           115                                  120                                  125  
 Lys Val Val Gln Lys Glu Asn Gln Thr Phe Pro Pro Gly Phe Leu  
           130                                  135                                  140

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 tccgggttac aggagcagcg caaccatttg cagggcaaac tgctcgagct gcaggtggag 180  
 cagacatccc tggagcccct ccaggagagc ccccgctcca caggtgtctg gaagtcccgg 240  
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agctcctcca gtggcctggg ctgcaaaggt aagcaccccc tgccaccocg gccgccttcc	420
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tccgggttac aggagcagcg caaccatttg cagggcaaac tgcggagct gcaggtggag	180
cagacatccc tggagcccct ccaggagagc ccccgctcca caggtgtctg gaagtcccg	240
gaggtagcca ccgagggcat ccgtgggcac cgcaaatgg tctctacac cctgcgggca	300
ccacgaagcc ccaagatggg gcaaggggtc ggctgctttg ggaggaagat ggaccggatc	360
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 <212> PRT  
 <213> Pongo pygmaeus

<400> 7	
Gly Glu His Pro Leu Pro Pro Arg Leu Pro Ala Pro Ile Pro Val Cys	
1 5 10 15	
Asp Thr Val Arg Val Thr Leu Gly Phe Val Val Ser Gly Asn His Thr	
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Leu Arg Lys Cys His Leu Asp Ile Thr Ser Ser Cys	
35 40	

<210> 8  
 <211> 58  
 <212> PRT  
 <213> Sus scrofa

<400> 8	
Gly Glu His Pro Pro Pro Phe Pro Leu His Ala Pro Val Ser Ile Thr	
1 5 10 15	
Ser Gly Phe Asp Val Ser Gly Asp Gln Thr Pro Arg Lys Gly His Leu	
20 25 30	
Asp Ile Thr Leu Ser Cys Cys Gln Ser Ser Arg Pro Arg Ser Ala Phe	
35 40 45	
Leu Glu Lys Leu Asn Leu Asp Ser Ile His	
50 55	

<210> 9  
 <211> 33  
 <212> PRT  
 <213> Pan troglodytes

<400> 9	
Gly Glu His Pro Leu Pro Pro Arg Pro Pro Ser Pro Ile Pro Val Cys	
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Asp Thr Val Arg Val Thr Leu Gly Phe Val Val Ser Gly Asn His Thr	

20

25

30

Leu

&lt;210&gt; 10

&lt;211&gt; 78

&lt;212&gt; PRT

&lt;213&gt; Ovis aries

&lt;400&gt; 10

Gly Glu Arg Leu Ser Ala Phe Pro Leu His Ile Thr Ile Arg Ala Thr  
 1 5 10 15  
 Ser Gly Ser Asp Val Ser Gly Asp Gln Ile Leu Asn Lys Glu His His  
 20 25 30  
 Ser Ser Leu Leu Ala Val Leu Arg Ala Lys Ala Cys Leu Ser Gly Asn  
 35 40 45  
 Ile Lys Phe Gly Gln His Ser Leu Ser Cys Leu Gly Ala Pro Ser Ile  
 50 55 60  
 His Leu Leu Pro Leu Thr Glu Arg Gly Arg Ile Phe Arg Met  
 65 70 75

&lt;210&gt; 11

&lt;211&gt; 26

&lt;212&gt; PRT

&lt;213&gt; Mus musculus

&lt;400&gt; 11

Gly Glu His Leu Pro Cys His Phe Pro Ala Lys Leu His Thr His Pro  
 1 5 10 15  
 Ile Pro Val His Ala Thr Leu Arg Gly Pro  
 20 25

&lt;210&gt; 12

&lt;211&gt; 33

&lt;212&gt; PRT

&lt;213&gt; Gorilla gorilla

&lt;400&gt; 12

Gly Glu His Pro Leu Pro Pro Arg Pro Pro Ser Pro Ile Pro Val Cys  
 1 5 10 15  
 Asp Thr Val Arg Val Thr Leu Gly Phe Val Val Ser Gly Asn His Thr  
 20 25 30

Leu

&lt;210&gt; 13

&lt;211&gt; 86

&lt;212&gt; PRT

&lt;213&gt; Felis catus

&lt;400&gt; 13

Gly Lys Pro Pro Pro Cys Gln Leu Asp Pro Pro Ala Pro Leu Leu Trp  
 1 5 10 15  
 Val Pro Pro Ser Glu Pro Leu Leu Gly Leu Leu Ser Leu Gly Thr Asn  
 20 25 30  
 Ser Glu Lys Lys Thr Leu Gly Leu Tyr Ser Leu Leu Leu Thr Val Leu  
 35 40 45

Lys Ala Lys Gly Arg Leu Ser Gly Asn Ile Lys Cys Gly His His Ser  
50 55 60  
Leu Leu Cys Pro Pro Arg Val Thr His Leu Leu Leu Pro Leu Trp Pro  
65 70 75 80  
Lys Gly Ala Glu Ser Pro  
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<210> 14  
<211> 169  
<212> PRT  
<213> *Canis familiaris*

<400> 14  
Met Glu Pro Cys Ala Ala Leu Pro Arg Ala Leu Leu Leu Leu Leu Phe  
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20 25 30  
Ser Pro Thr Ser Glu Ala Ser Glu Ala Ser Glu Ala Ser Gly Leu Trp  
35 40 45  
Ala Val Gln Glu Leu Leu Gly Arg Leu Lys Asp Ala Val Ser Glu Leu  
50 55 60  
Gln Ala Glu Gln Leu Ala Leu Glu Pro Leu His Arg Ser His Ser Pro  
65 70 75 80  
Ala Glu Ala Pro Glu Ala Gly Glu Glu Arg Pro Val Gly Val Leu Ala  
85 90 95  
Pro His Asp Ser Val Leu Gln Ala Leu Arg Arg Leu Arg Ser Pro Lys  
100 105 110  
Met Met His Lys Ser Gly Cys Phe Gly Arg Arg Leu Asp Arg Ile Gly  
115 120 125  
Ser Leu Ser Gly Leu Gly Cys Asn Gly Lys Pro Pro Pro Cys His Leu  
130 135 140  
Gly Ser Pro Ser Pro Ala Pro Trp Val Arg Pro Leu Glu Pro Leu Leu  
145 150 155 160  
Gly Leu Leu Ser Arg Gly Ile Thr Leu  
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<210> 15  
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<212> PRT  
<213> *Dendoaspis angusticeps*

<400> 15  
Pro Ser Leu Arg Asp Pro Arg Pro Asn Ala Pro Ser Thr Ser Ala  
1 5 10 15

<210> 16  
<211> 32  
<212> PRT  
<213> *Homo sapiens*

<400> 16  
Ser Pro Lys Met Val Gln Gly Ser Gly Cys Phe Gly Arg Lys Met Asp  
1 5 10 15  
Arg Ile Ser Ser Ser Ser Gly Leu Gly Cys Lys Val Leu Arg Arg His  
20 25 30

<210> 17

<211> 41  
<212> PRT  
<213> *Dendroaspis angusticeps*

<400> 17  
Glu Val Lys Tyr Asp Pro Cys Phe Gly His Lys Ile Asp Arg Ile Asn  
1 5 10 15  
His Val Ser Asn Leu Gly Cys Pro Ser Leu Arg Asp Pro Arg Pro Asn  
20 25 30  
Ala Pro Ser Thr Ser Ala Asp Asn Pro  
35 40

<210> 18  
<211> 28  
<212> PRT  
<213> *Homo sapiens*

<400> 18  
Ser Leu Arg Arg Ser Ser Cys Phe Gly Gly Arg Met Asp Arg Ile Gly  
1 5 10 15  
Ala Gln Ser Gly Leu Gly Cys Asn Ser Phe Arg Tyr  
20 25

<210> 19  
<211> 22  
<212> PRT  
<213> *Homo sapiens*

<400> 19  
Gly Leu Ser Lys Gly Cys Phe Gly Leu Lys Leu Asp Arg Ile Gly Ser  
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Met Ser Gly Leu Gly Cys  
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<210> 20  
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<221> VARIANT  
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<221> VARIANT  
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<223> Xaa = Cys or Pro

<221> VARIANT  
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<223> Xaa = Pro, His, Gln, or Arg

<221> VARIANT  
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<223> Xaa = Asp, Gly, or absent

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<223> Xaa = Val, Ile, Pro, Val, Ser, or Leu

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<223> Xaa = Leu, Ser, or His

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<223> Xaa = Gly or Ala

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<223> Xaa = Val, Asp, or Leu

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<221> VARIANT  
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<400> 22  
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<210> 23  
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<400> 23  
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<210> 24  
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<400> 24  
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<210> 25  
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<400> 25

agacatggat ccccagacag

20

<210> 26

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<223> Primer

<400> 26

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20

<210> 27

<211> 20

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<213> Artificial Sequence

<220>

<223> Primer

<400> 27

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<210> 28

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<212> DNA

<213> Artificial Sequence

<220>

<223> Primer

<400> 28

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<210> 29

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 35 40

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 <212> PRT  
 <213> Homo sapiens

<400> 36  
 Ser Pro Lys Met Val Gln Gly Ser Gly Cys Phe Gly Arg Lys Met Asp  
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 Pro Pro Arg Pro Pro Ser Pro Ile Pro Val Cys Asp Thr Val Arg Val  
 35 40 45  
 Thr Leu Gly Phe Val Val Ser Gly Asn His Thr Leu  
 50 55 60

<210> 37  
 <211> 32  
 <212> PRT  
 <213> Canis familiaris

<400> 37  
 Gly Lys Pro Pro Pro Cys Arg Leu Gly Ser Pro Ser Pro Ala Pro Trp  
 1 5 10 15  
 Val Arg Pro Leu Glu Pro Leu Leu Gly Leu Leu Ser Arg Gly Ile Thr  
 20 25 30

<210> 38  
 <211> 510  
 <212> DNA  
 <213> Canis familiaris

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 gcctcgggaag cctcgggggt gtgggcccgtg caggagctgc tgggccgtct gaaggacgca 180  
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 ggcgggaggc tggaccggat cggtccctc agtggcctgg gctgcaatgg taagccgcct 420  
 ccctgccacc ttggtcctcc ctccccagcc cctgggttc gaccttgga accccttctg 480  
 ggtttgttgt ctgggggat cacactctga 510

